

#### **ABSTRACT OF THE DISCLOSURE**

A polymer gel display, fabrication method and operating structure thereof. Display is enabled by utilizing the flexing characteristic of a polymer-gel sheet. A pair of  
5 substrates is separated by a predetermined gap, and a polymer-gel sheet of a first color disposed therebetween, having two ends fixed, a center area flexible and contacting no more than one of the substrates. A fluid layer of a second color is disposed between the substrates, displaying  
10 its color via the substrate not contacting the polymer-gel sheet. An external electric field is applied to the polymer-gel sheet, flexing the polymer-gel sheet toward the substrate until making contact and the first color of the polymer-gel sheet is displayed via the substrate.

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